

3.6 odd answers

1. proper

3. false

5. $(-\infty, 3) \cup (3, \infty)$

7. $(-\infty, -1/2) \cup (-1/2, 3) \cup (3, \infty)$

9. $(-\infty, \infty)$

11. a) domain: $(-\infty, 2) \cup (2, \infty)$ range: $(-\infty, 1) \cup (1, \infty)$ b) (0,0) c) $y = 1$ d) $x = 2$ e) none

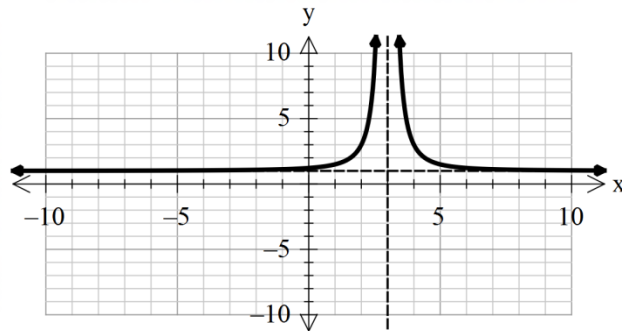
13. a) domain: $(-\infty, -2) \cup (-2, 2) \cup (2, \infty)$ range: $(-\infty, 0] \cup (1, \infty)$ b) (0,0) c) $y = 1$ d) $x = 2, x = -2$ e) none

15. parent graph: $y = \frac{1}{x^2}$ transformations: vertical stretch by 2, right 3, up 1

Parent table:

table for $G(x) = 1 + \frac{2}{(x-3)^2}$:

x	y
-2	1/4
-1	1
-1/2	4
1/2	4
1	1
2	1/4



X+3	2y+1
1	3/2
2	3
2 1/2	9
3 1/2	9
4	3
5	3/2

17. VA: $x = 3$ oblique: $y = x + 5$

19. VA: $x = -1/3$, HA: $y = 2/3$

21. VA: $x = 0$, End behavior asympt.: $y = x^2 + x + 1$

23. even

25. odd